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On the ALBERTA HEALTH Horizon



GOVERNMENT OF THE
PROVINCE OF ALBERTA
DEPARTMENT OF PUBLIC HEALTH

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FOREWORD

In 1945 Alberta's Department of Public Health observed its twenty-fifth anniversary—an anniversary which might well be said to mark the attainment of its adulthood in the service of the province,

for, under the impetus of Alberta's swiftly expanding needs it has grown up. In the brief span of a quarter of one century, it has become a maturely developed organization well worthy of guarding that most precious heritage—the health of the people.

But its work is not finished. It will never be finished as long as there exists in Alberta disease fostered by carelessness, by uncleanness, and by those lethal enemies of progress: ignorance and fear. It will not be finished until every man, woman and child in Alberta enjoys the rich returns of optimum health. To this end, with every means available through science and through education, it must keep striving not only to cure those who are ill, but what is even more vital, to keep those who are well healthy.

It is in order, therefore, to present a picture of what is being done and of what remains to be done in the task of safeguarding the health of the people of Alberta, that this brochure has been compiled.

W. W. CROSS, M.D.
Minister

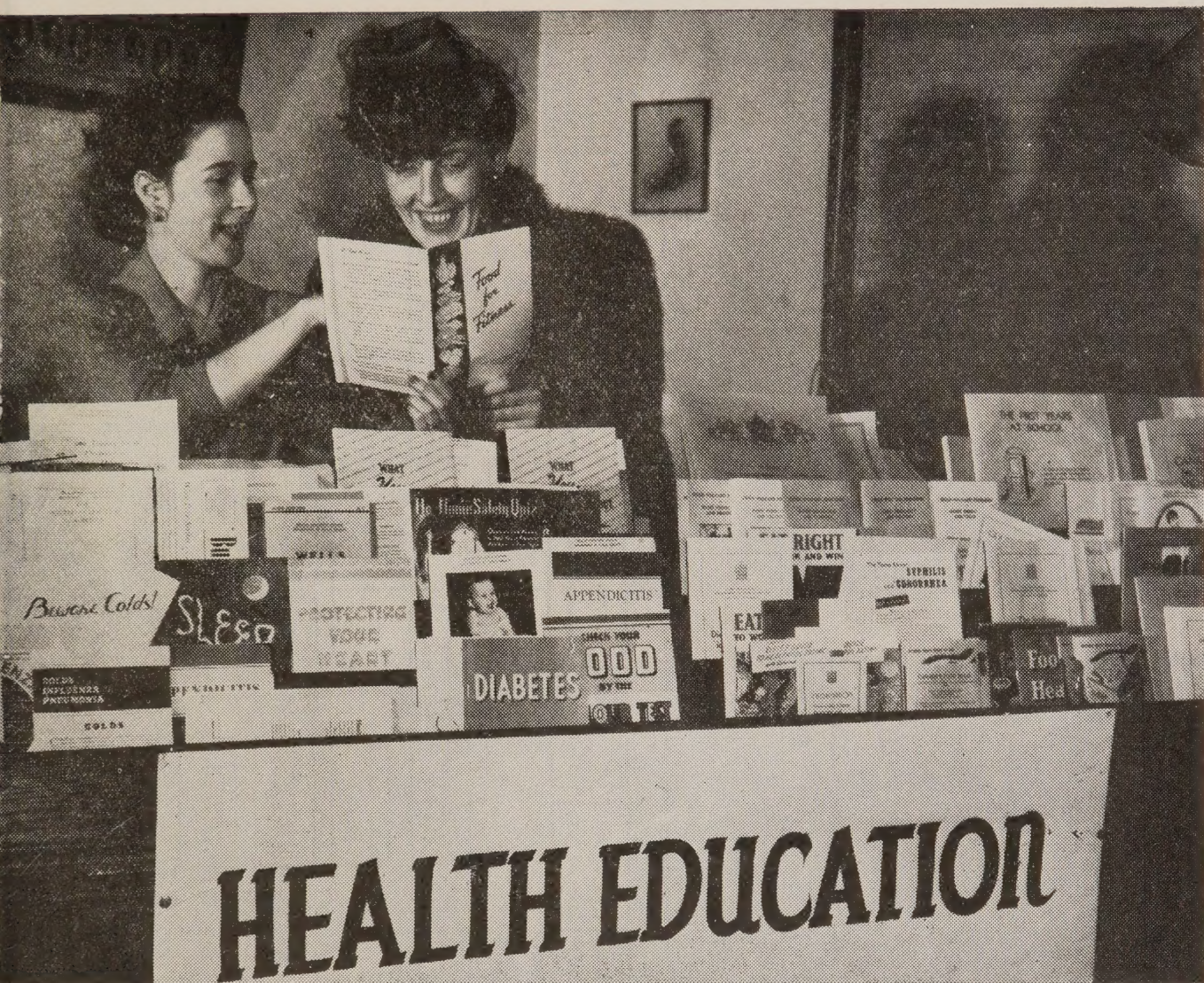
MALCOLM R. BOW, M.D.
Deputy Minister

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For your convenience in studying the work of the various branches and divisions of the Provincial Department of Public Health, as described in this brochure, the written material is here- with listed alphabetically.

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Health is vital to life, for when health is entirely lost, life dies. It is vital to happiness, for with ill health as his heritage, man finds living a burden which he can scarcely bear. It is vital to success, for whether ill health be desperate and lethal, or merely petty and nagging, it is costly, strength-sapping and dangerous. Yet it is a strange fact that though people will plan for everything under the sun from new clothes for the children to a new house for the family, they seldom plan for health. Why not? Is it because of failure to realize the value of their health until they have lost it? Or, is it because they don't know how to plan for it?

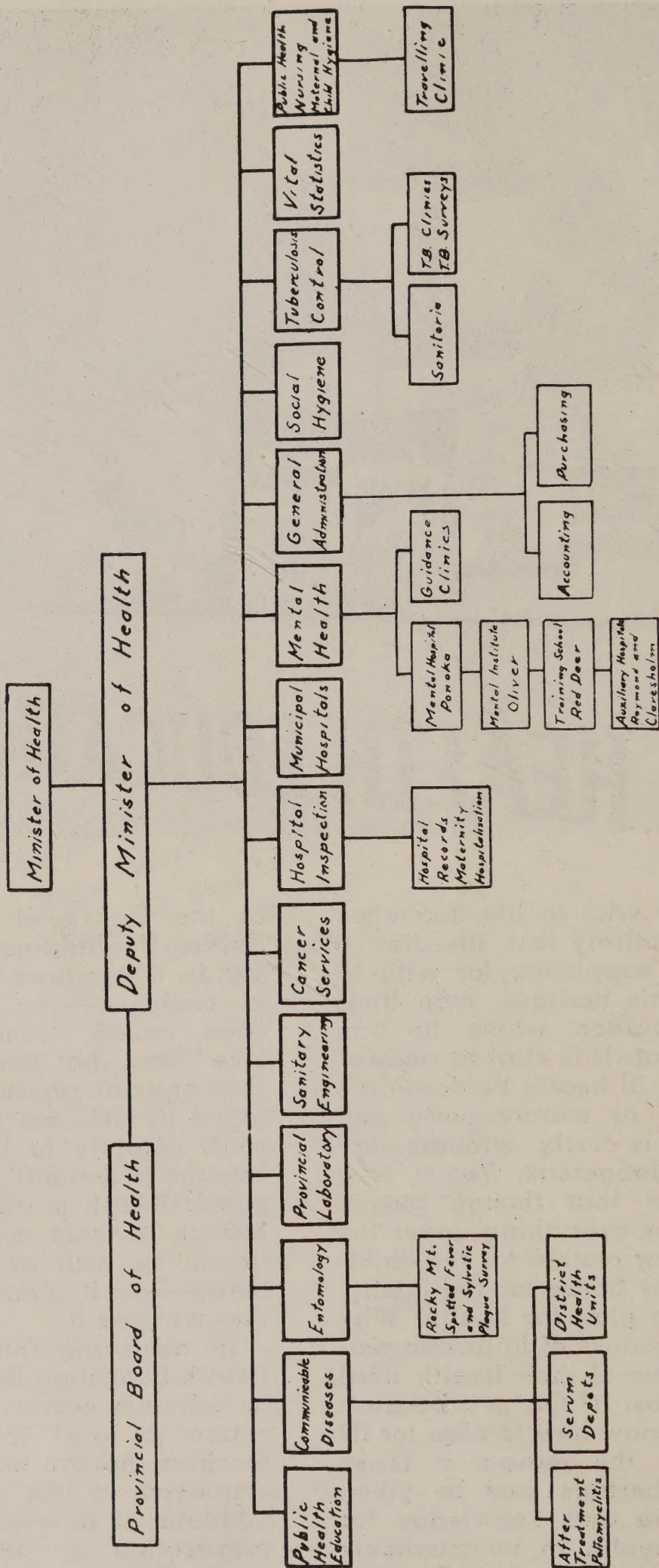
Whatever the reason, it is so that all Albertans may be given the incentive and knowledge for achieving health in its maximum that the Health Education Division

of the Provincial Department of Public Health functions. In other words, it practices the newest kind of medicine—the kind that has been called “constructive medicine”, and that has as its concept that optimal physical fitness imagined by William James when he said: “Merely to live, move, and breathe is delight!” This concept of public health is all inclusive, and has as its goal mental and emotional, as well as physical well-being—and it is for every Albertan that we seek it.

In achieving this objective the Health Education Division provides an advisory service in Health Education to local communities and teachers through trained personnel employed by the department. In addition, it is responsible for the preparation of health bulletins, news letters, exhibits, posters,

PROVINCE OF ALBERTA DIVISIONAL ORGANIZATION CHART DEPARTMENT OF PUBLIC HEALTH

September 1946



radio talks, and motion pictures of Alberta's health services. It has available literature on all the subjects pertaining to health which is free to the public on request, as well as a film library, the contents of which are sent out on loan to public health personnel and to responsible community groups in a position to obtain the use of projectors. Lectures illustrated with films on a variety of health topics are provided when possible as a free service to community groups, while talks on health as outlined in the curriculum are also given when possible to school children on request.



An Alberta nurse, in the picture above, points the way to health. At right, a health talk is given, with the aid of motion pictures, in a rural school.



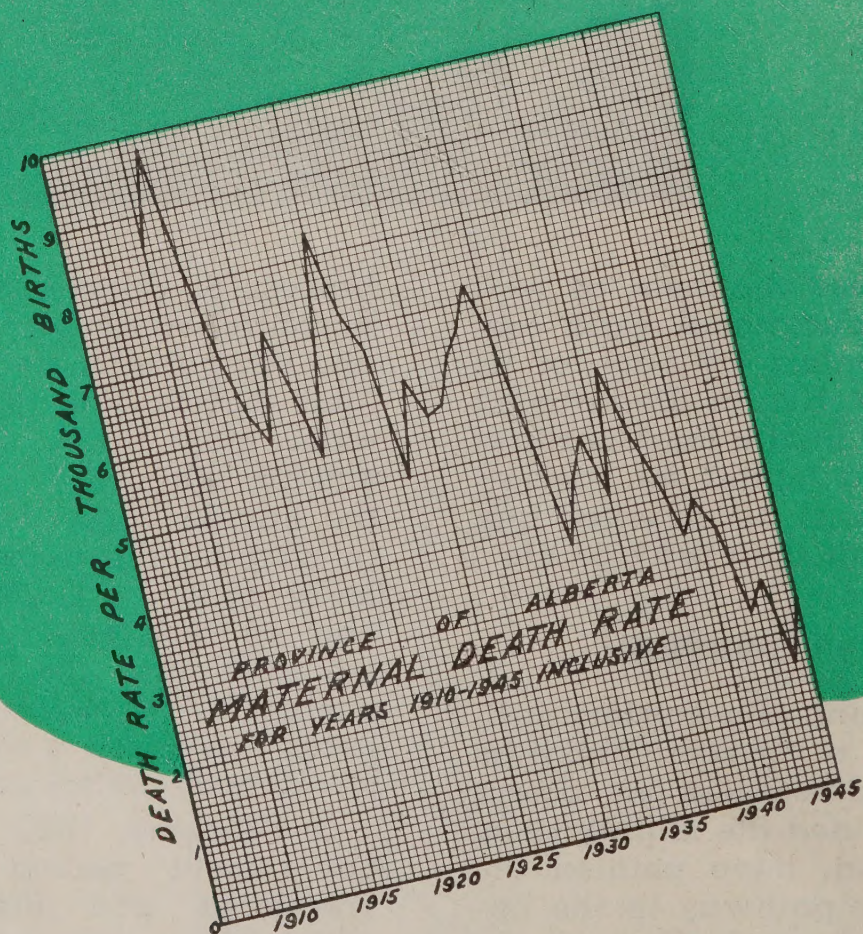
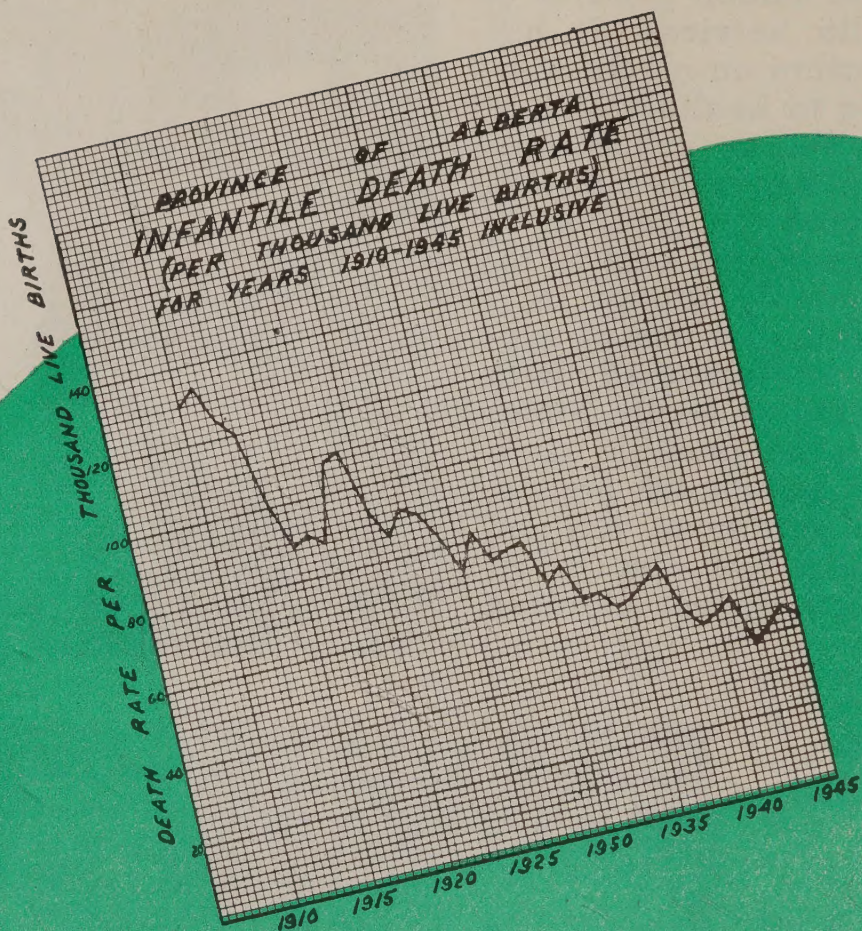
Through these channels, as well as through educational work carried on separately by each of its divisions, the Health Department seeks to make health for Albertans, not so much a matter for specialized teaching, as an accepted and integral part of their way of life.

CANCER CONTROL

It is something of a mystery still, this business of Cancer, but it is by no means a hopeless one. Scientists have divided the mighty atom and, with that, have pointed the way to a new pathway in the unexplored tundra of Cancer research. It is now agreed that the

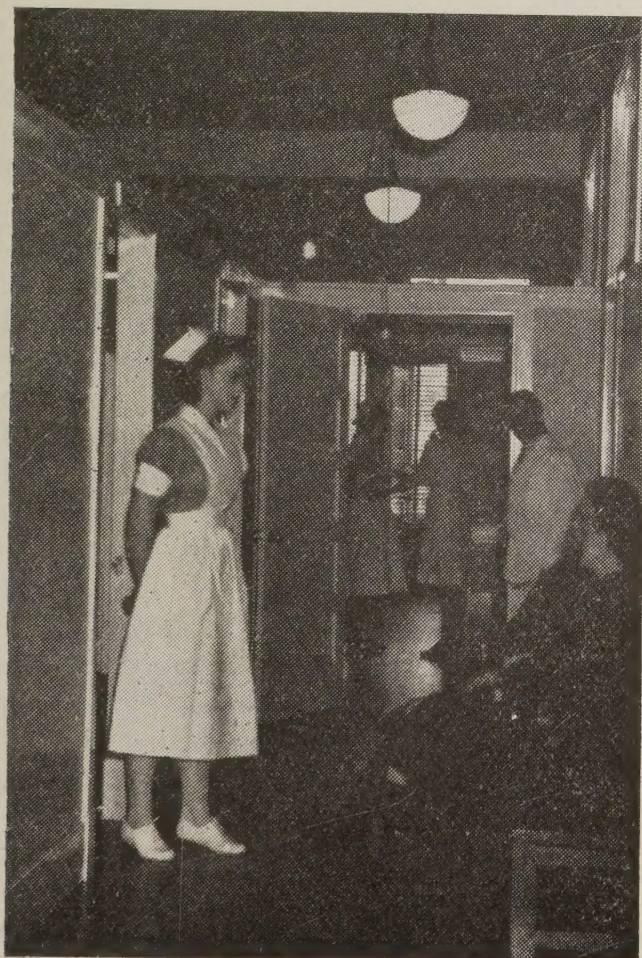
process of Cancer formation is an uncontrolled activity in the growth and reproduction of the living cell. Thus discovery of the secret of the atom may bring us close to a similar discovery in relation to the human tissue cell—and therein may lie the answer to the primary cause of Cancer. It is on a note of fresh hope, therefore, that we enter upon the "age of atomic energy." And in the meantime Alberta has taken a forward step in her Cancer control programme.

In February, 1940, the provincial government passed The Cancer Treatment and Prevention Act, which did a unique thing. It made possible the establishment of two





Above, two laboratory technicians slice cancerous tissue prior to a scientific examination. Below, patients are shown waiting for examination at the Cancer Clinic in Edmonton.



Cancer clinics in the province where patients could be examined and where they could obtain authorization for further diagnostic and treatment services at no direct cost to themselves. The diagnostic services include tissue examination, x-ray examination, and when necessary and authorized by the clinic, surgical operations of a major or minor nature. One routine hospital pathological charge is also paid by the Department as well as any operating room and anaesthetic fees which may be incurred in the process of diagnosis or treatment. The forms of treatment may consist of x-ray therapy, radium therapy and surgical operation. It is important to note, however, that the Cancer clinic does not pay for hospitalization during the treatment period, though it will do so at public ward rates during the period in which diagnosis is being established, if such period does not exceed two weeks.

Thus, as soon as the diagnosis is completed and treatment commences, the patient must provide for his own hospitalization. It is also important to note that only those patients admitted to hospital on the order of the Cancer clinics will be eligible for the above services.

There are Cancer clinic centres at both Calgary and Edmonton. They are held at the Provincial Building in Edmonton every Tuesday and Friday mornings commencing at 9 o'clock and at the Holy Cross Hospital in Calgary every Friday afternoon commencing at 2 o'clock. To be admitted one must be referred to the clinic by one's attending physician, who must make application on forms supplied for the purpose. Should a patient be unable to provide transportation to one of the diagnostic clinic centres or to a centre in which treatment has been authorized by the Cancer clinic, he may apply to the secretary of the municipality, of which he is resident, for assistance.

Since January 1st, 1941, until the spring of 1946 approximately 7,600 persons had taken advantage of the provincial Cancer services.

The personnel of the clinics includes surgeons, physicians, radiologists and pathologists. These men are specialists and, at the same time, are easily approachable persons who are ready with a kindly concern and a friendly interest in the welfare of the patients who pass through their hands.

At the present time the great objective in the Cancer program in Alberta is to persuade people to consult their family doctors early—that is, with the first appearance of suspicious symptoms. In the furtherance of individual and common good, therefore, it behooves each Albertan to aid in reducing the Cancer death rate by becoming familiar with the danger signs. These are:

1. Any lump, especially in the breast.

2. Any sore that does not heal readily.

3. Any pigmented wart or mole that shows change in size or color, or any wart or mole subject to chronic irritation.

4. Any irregular bleeding or discharge.

5. Vague symptoms of indigestion in persons over 35 years of age, especially if there is slight anaemia, and loss of weight.

6. Any source of irritation, especially in the mouth.

It should be stressed here that the Department of Public Health does not attempt to monopolize the management of Cancer. It places the services at the disposal of the public and the medical profession. The acceptance of them is a voluntary matter. The Cancer clinics are open to all residents of Alberta.

Cancer is curable in its early stages, **and time is of vital importance.**

VITAL STATISTICS

Strange as it may seem, though few Albertans will attain Hollywood fame, the stories of Alberta lives are being filmed every day. Their births, adoptions, marriages, divorces and deaths are being recorded by photography—and still we call them vital statistics! They are vital, it is true, vital in one hundred and one undreamed of ways, to both the dominion and provincial governments, as well as to innumerable individuals for innumerable personal reasons. But they are more than statistical, for they epitomize the heartbeat of Alberta. Fused with them, throbbing round about them, is all the joy and tragedy that has gone into her growth. They are the story of human lives and as such are redolent with drama, drama which began to be recorded in Alberta with the first white settlers when the prov-

ince was still part of the Northwest Territories, whose seat of government was located at Regina.

At that time Alberta was divided into districts with police headquarters in each, and one of the duties of the officials in charge of each district was the recording of births, marriages and deaths. These were collected from the most remote areas by the Royal North West Mounted Police constables on their regular rounds. When the Province of Alberta was officially established in 1905, these records were transferred to Edmonton and became the basis for the present files of the Bureau of Vital Statistics, so that there are in this office the original records of the earliest settlers in Western Canada.

The primary work of the Bureau of Vital Statistics is still the collection and recording of births, marriages and deaths. But it has come a long way since 1905. Its work is accomplished now with the assistance of about 500 district registrars who collect the records and forward them to the head office weekly. The work of recording, which, prior to war years, was performed by typists, is now done by microfilm cameras, and two operators can accomplish the work of thirty stenographers. A duplicate of each film is sent to the Bureau of Vital Statistics at Ottawa, where a national register for the whole of Canada is being compiled. The ultimate objective of this system is a national and provincial index of



The Vital Statistics branch of the Health Department is not all a matter of adding and subtracting. Much of the numerical work is done with up-to-the-minute machines. In the picture above, the girls are shown working with a camera which records statistics on micro-film.

the vital records of every individual in Canada.

A particularly difficult phase of the work, which might be explained in view of its increasing importance and the increasing amount of controversy which surrounds it, is that of delayed birth registrations. Birth certificates have assumed a significance in the lives of Canadian citizens that was undreamed of in the years before the first Great War. They are now necessary, not only as proof of age in such matters as family allowances, insurance policies, and superannuation and pension schemes, but they are also required for identification purposes by Canadian-born citizens who are seeking entrance to the United States. Hand in hand with this increase in their

importance has come a dominion-wide surge of requests for registration from persons who were not registered at the time of birth, and it is an unfortunate fact that many such registrations have been falsely sought by aliens who were not born in Canada, as well as persons who, for some reason or other, have wished to establish false ages. Adding to the difficulty was the fact that until recently there were no uniform regulations regarding proof of birth in force in the nine provinces. Thus, a critical situation was rapidly developing in which birth certificates were becoming virtually meaningless as proofs of age or citizenship. With the advent of war conditions and the formulation of plans for family allowances, it became even more



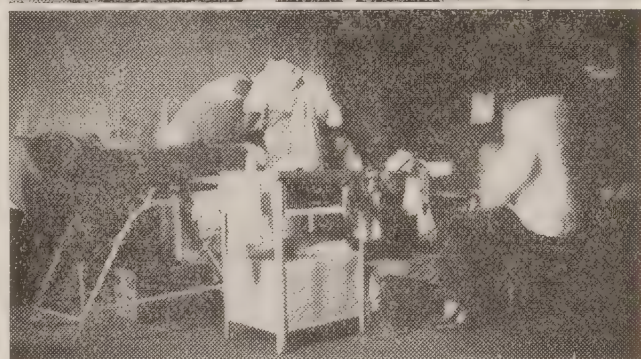
One of Edmonton's busier offices! Here is where vital statistics are literally made, as hundreds of Albertans every day record their marriages and births, obtain licenses and deal with other related matters.

imperative that national regulations governing delayed registrations be laid down. Accordingly, at the 1944 Dominion-Provincial Conference, the provincial representatives agreed upon a standard set of requirements to be universally enforced across the dominion. Hence, while it had always been necessary in Alberta for the individual to give some kind of indisputable proof of the place of his birth, the date of his birth and the identity of his parents, for registration purposes, this now was necessary in all provinces.

The Alberta Vital Statistics Bureau has divers other activities over and above those just mentioned. It keeps records of changes of names and legitimations. It administers The Marriage Act and issues marriage licenses in more than 200 centres, the clergy of all denominations being registered and issued with certificates of authorization. It registers cemeteries in the province and requires that their owners



Northern dogs, shown above, may not be stream-lined, but they have the power and endurance required in conveying the district nurse through remote parts of the province. In the lower picture, is seen the Child Welfare clinic in Edmonton.



Top: First aid is given a victim of a water accident at Lesser Slave Lake; **centre:** the nurse immunizes an Indian child in the Kinuso district; **bottom:** the staff of the Travelling Clinic at work.

report all interments, which are, in turn checked against the deaths, thus insuring that no body is surreptitiously buried in Alberta. The Bureau compiles statistical tables and publishes them annually. These provide information regarding population, and are the yardstick of Alberta's growth and achievement in combatting causes of death and the basis upon which further improvement can be planned.

To sum up, vital statistics provide the "bookkeeping" of public health, and intelligent planning for health is impossible without them.

NURSING SERVICES

The most unique of nursing services is the one rendered by the District Nurses, who man their posts in the most isolated areas of our province. They may travel by horse or dog team. They may work in one roomed shacks by the dingy light of coal oil lamps. But wherever they go, by whatever mode of travel, they serve the people of Alberta and save untold numbers of lives. More than this, they are the ever zealous missionaries of health, in the homes, in the classrooms, in their offices and in the examples which they themselves set in the community. Their service must needs be a selfless one, and not infrequently a lonely one. It has also been of long duration, for it began in 1918 when four nurses alone constituted the field staff, and it has grown in the past twenty-five years until there were in 1945, thirty-six specially trained Public Health Nurses serving under the Public Health Nursing Division of the Provincial Department of Health as District Nurses.

Operating from her small cottage where she lives alone, the District Nurse offers a diversified programme. She maintains an office supplied by the Department of Public Health with drugs and nursing and surgical equipment. Here she receives emergency cases and patients who either cannot reach a doctor, or whose illness is not of a serious enough nature to require a doctor's care. From here she goes out, "come wind, come weather", to answer the call of sickness in the home. In the past her maternity service has been extensive, but since the inauguration of free hospitalization for maternity cases, it has been reduced considerably in some areas. More vi-

tal now is her pre-natal and post-natal work, because upon it, as upon her individual and group teaching of health largely depends the future health of her community. Of vital importance, too, is the free immunization service carried on. Through it, and at the same time through efforts in general communicable disease control, epidemics in these isolated areas have been cut to a minimum, and the children of all co-operative parents are facing a future as free of the major communicable diseases as science and the District Nurse can make them. Where possible, the programme also includes child welfare investigations, regular baby clinics and yearly school health inspections. Aside from all this, the District Nurse co-operates with every Division of the Health Department, as well as with sundry other provincial and national organizations.

The treatment service of the District Nurse was indispensable during the war years. This is readily understood when it is realized that often she was the only source of medical aid in districts lying anywhere from thirty to eighty miles from the nearest doctor or hospital. And she has by no means outlived her usefulness; rather, as it decreases in the treatment field, it will become proportionately greater in the preventive field. Her work in the latter field, has the advantage of being conducted at little expense to the members of the community, who are only required to supply her with a house and fuel, and pay a nominal fee to the Department for treatment and drugs, while the family requiring her services is responsible for her transportation. Invariably the residents of the district are glad to do this, for it is a small return for the security provided by the nurse to the community. In fact, during recent years, there have been more areas asking for the service, than



Top: Doctor visits a city school for his regular examination of students; centre left: immunization of a pre-school age youngster; centre right: a laboratory technician at work in the Edmonton rural health unit; bottom: a typical health unit laboratory.

there have been nurses to supply it. Due to the extreme shortage of trained personnel, it has been a virtually impossible task to keep even those districts in which the service is already established, staffed. It is hoped, however, that more districts may be opened as qualified nurses become available. The total annual cost to the Department of maintaining the service in each district, over and above what fees are collected is approximately \$2,000 per nurse.

Another service, the organization of which is undertaken by the Public Health Nursing Division, is that of the Travelling Clinic. Prior to 1942, a staff which consisted usually of one surgeon, one anaesthetist, two dentists, three nurses and two truck drivers, visited an average of twenty-four centres each year, providing physical examinations, dental examinations, health education and immunization, as well as minor surgery and dentistry. Minimum charges are made for dentistry and minor surgical operations. Where patients are not in a position to pay such charges, the service is provided free. From its origin in 1924 to 1942, when it was of necessity temporarily discontinued, the Clinic visited 423 centres, examined 48,475 children, and performed 10,049 tonsil and adenoid operations. It is planned that it will go into operation again as soon as the necessary personnel is available.

In addition to its distinctly rural services, the Public Health Nursing Division, in co-operation with City Health Departments, sponsors a child hygiene programme adapted to urban centres and adjoining rural areas. In Edmonton, Calgary, Medicine Hat, Drumheller and Vegreville, there are nurses stationed who carry on a full schedule of baby and pre-school clinics, inspections of school children, pre-natal and post-natal classes, and

general educational work concerned with the health of the child.

RURAL HEALTH DISTRICTS

Giving a purely preventive service, but on a much broader scale than the Child Hygiene Clinics, and operating under a provincial supervisor, are the staffs of the Rural Health Districts. These "Health Units" as they are called, have made it possible for communities which are rural but not as isolated as the areas served by the district nurses, to enjoy public health advantages previously only enjoyed by our urban centres. The minimum staff of such a Health Unit, to function adequately, must include a medical health officer, at least two public health nurses, a sanitary inspector, and a stenographer or office assistant, and the personnel must be specially trained for their respective duties. A public health laboratory is also established in each Health Unit office and its facilities are of great value to the community in the prevention and control of communicable diseases.

With an adequate staff the Health Unit becomes an effective organization for preventive medicine. Its programme covers every aspect of communicable disease control—including vaccinations and inoculations—sanitary inspection and food supervision; pre and post-natal service to mothers; infant and child welfare; school health service, life extension services for adults, and promotion of mental hygiene and nutrition.

Over and above these services and yet fused and interwoven inseparably with them, is the constant health education carried on by all members of the staff in their every day work. Special health messages are also transmitted to the public by posters, talks to school and community groups, moving pictures, press and radio.



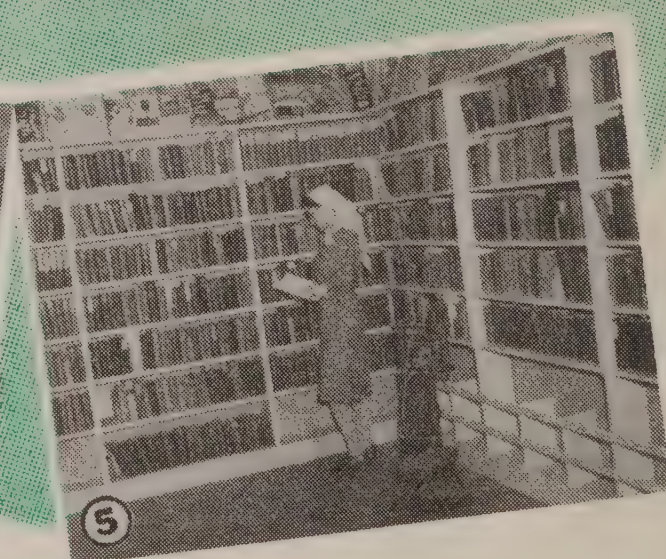
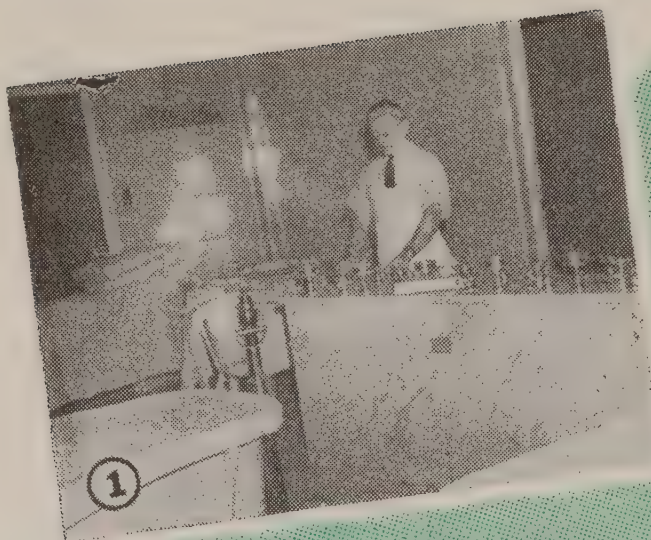
A display of the work completed by occupational therapy patients at the Ponoka mental hospital, Ponoka, Alberta.

Now operating are districts covering the High River-Turner Valley, Red Deer, Lamont, Stettler, Didsbury, Rural Edmonton, Helden and Two Hills areas, while basic programmes have been commenced in

the Rocky Mountain House, MacLeod-Pincher Creek, Brooks, Strathmore, Westlock, Athabasca, Wainwright, McLennan and Spirit River school divisions. These latter are being temporarily tided over by



At left, above, is a work bench, occupied by busy patients at the Red Deer training school. Right, a patients' lounge room at the Ponoka hospital.



1. The hydrotherapy room at the Ponoka mental hospital; 2. part of the day's work at the Red Deer training school; 3. an exterior view of the hospital at Ponoka; 4. the beauty parlour in the Ponoka hospital; 5. a well-stocked corner of the patients' library, Ponoka.

one-nurse staffs, but will go into a full programme as soon as the necessary personnel is available.

One half of the budget of each unit, up to a maximum contribution of \$7,000, is provided by the Department, while the district served provides the balance. A separate trust fund is set up for each unit and the accounts must be approved by an officer of the district board of health before being sent to the Department for payment. Quarterly financial statements are prepared and forwarded to each district. It is estimated that the approximate annual cost per capita for the service in the districts receiving it, is, at the present time, seventy-two cents.

In brief, it can be said that in our Health Units we have found an effective means by which a modern preventive health programme can eventually be made available to all residents of our rural districts and smaller urban centres at a very reasonable cost.

MENTAL HEALTH SERVICES

There is an approximate total of 3,000 patients in residence in Alberta's four institutions for the care and treatment of the mentally ill and the one institution for the mentally deficient. The incidence of mental illness is no higher in Alberta than in any other province, and as our understanding of them increases, it is hoped that it will be gradually lessened.

Admissions to any of the provincial institutions are governed by The Mental Diseases Act and The Mental Defectives Act. Patients may be admitted on a voluntary basis or certified as in need of treatment by qualified physicians or, as in the majority of cases, committed by warrant of the Attorney General.

The Provincial Mental Hospital at Ponoka is the chief reception and active treatment centre in the

province. Between 500 and 600 patients are admitted and between 300 and 400 are discharged from it annually. Of those admitted, however, many have been in institutions before, and of those discharged, many are transfers to various other mental hospitals. Where suitable, also, some are granted leave of absence to work on nearby farms.

Following admission to the hospital, the patients are given thorough physical and mental examinations, including x-ray and laboratory tests. A diagnosis is made as soon as possible and treatment is prescribed accordingly.

Treatments fall generally under such categories as psychotherapy, hydrotherapy, occupational therapy, drug therapy, shock therapy (including electro shock and insulin therapy) and special forms of treatment such as fever therapy. By this means every effort possible is made to bring about recovery from the illness, and, if complete recovery is not possible, then the arrest of the progress of the condition. Occupational therapy is a major part of the work, and in connection with it there are special instructors and workshops for training in many trades. A beauty parlour is operated for the patients and a farm of considerable size is likewise maintained. The latter is concerned with the growing of vegetables and grain crops, butter and egg production, sheep raising, hog raising, the keeping of bees, and maintaining a dairy herd for milk production. Fruits and vegetables are also prepared in a special cannery and vegetables drying unit.

The staff of the Ponoka Hospital, including physicians, nurses, attendants, ward aides, domestic staff, dietetic staff, office staff, farm staff, maintenance and public works staff, totals approximately 300 persons. Many of these are

trained by the institution. Male attendants and ward aides are suitably prepared for their duties and a training school for nurses is operated in conjunction with the hospital, as well as a special post-graduate course in Psychiatric Nursing for general graduates.

Thus it will be seen that the Provincial Mental Hospital is virtually a self-contained unit, and it is an interesting point that the co-operative efforts of the patients contribute to a considerable extent to its upkeep.

Similar administration and treatment methods are found at the Provincial Mental Institute, Edmonton. This institution houses about 1200 patients, most of whom are male, and is largely concerned with the continued treatment of long standing cases. A limited number of both male and female cases are admitted annually, however, for a period of observation—many of them on remand from the courts. This latter function is of considerable value to the public and it is expected that a regular reception service will be developed as soon as conditions permit.

The Claresholm Auxiliary Mental Hospital and the Auxiliary Mental Hospital at Raymond are both under the direct jurisdiction of the Ponoka Institution and receive all of their patients by transfer from it. They are designed for the care and continued treatment of female patients and can accommodate 100 and 115 patients respectively.

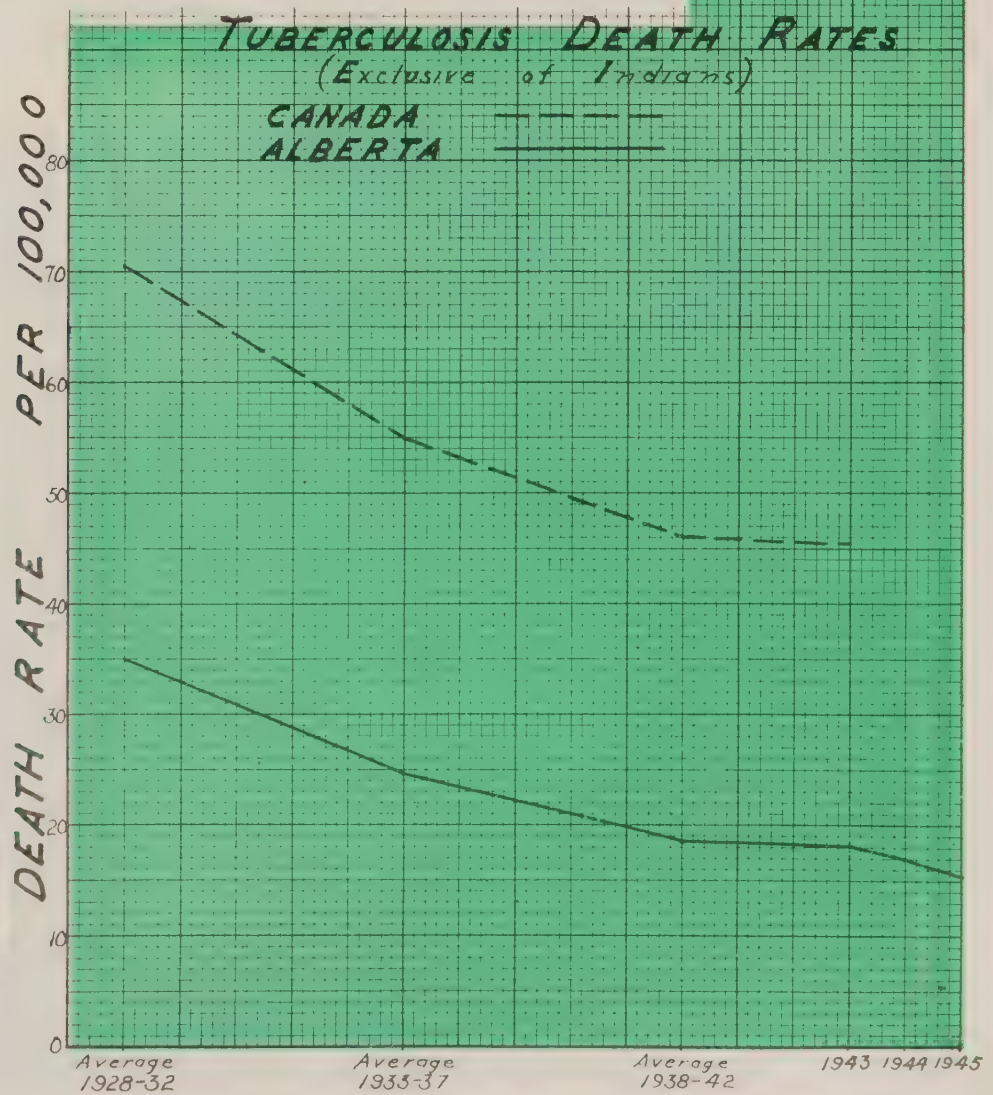
Mental defectives of Alberta receive care and training at the Provincial Training School for Mental Defectives at Red Deer. There are about 285 male and female patients housed there at the present time and plans are now under way for the erection of new units to permit a much needed expansion. Where possible, both boys and girls of the school receive suitable

academic instruction and vocational training, and many of them are subsequently discharged to support themselves in the community. A farm in connection with the institution assists in the practical education of many of the boys, as well as contributing to provisioning. The staff of the Training School resembles that of the Mental Hospital in that it includes a Medical Superintendent, an assistant physician, nurses, attendants, instructors, office staff, farm staff, and maintenance and engineering staffs.

It is a point of interest to note that while the government receives \$1.00 per day hospitalization costs from patients at the Mental Hospitals, and 50c per day from their municipalities for those at Red Deer, the cost of the operation of these institutions to the province, over and above the total of such fees, is approximately two million dollars annually.

Guidance and Mental Hygiene Clinics

These clinics provide an interesting and valuable service. They are designed for the examination, diagnosis, and, where possible, for the treatment of cases of maladjustment and nervous and mental disorders. Because many mental illnesses are essentially due to maladjustment to environment, it is hoped to detect cases in the Guidance Clinics while readjustment is still possible. The clinics have been functioning since 1929. From then until the fall of 1945 about 6,000 new cases were handled, as well as follow-up examinations mounting into the thousands. Psychiatrists and social workers attached to the Provincial Mental Hospitals comprise the personnel, and a great deal of their time is devoted to the examination of mental defectives and epileptics. In these cases recommendations



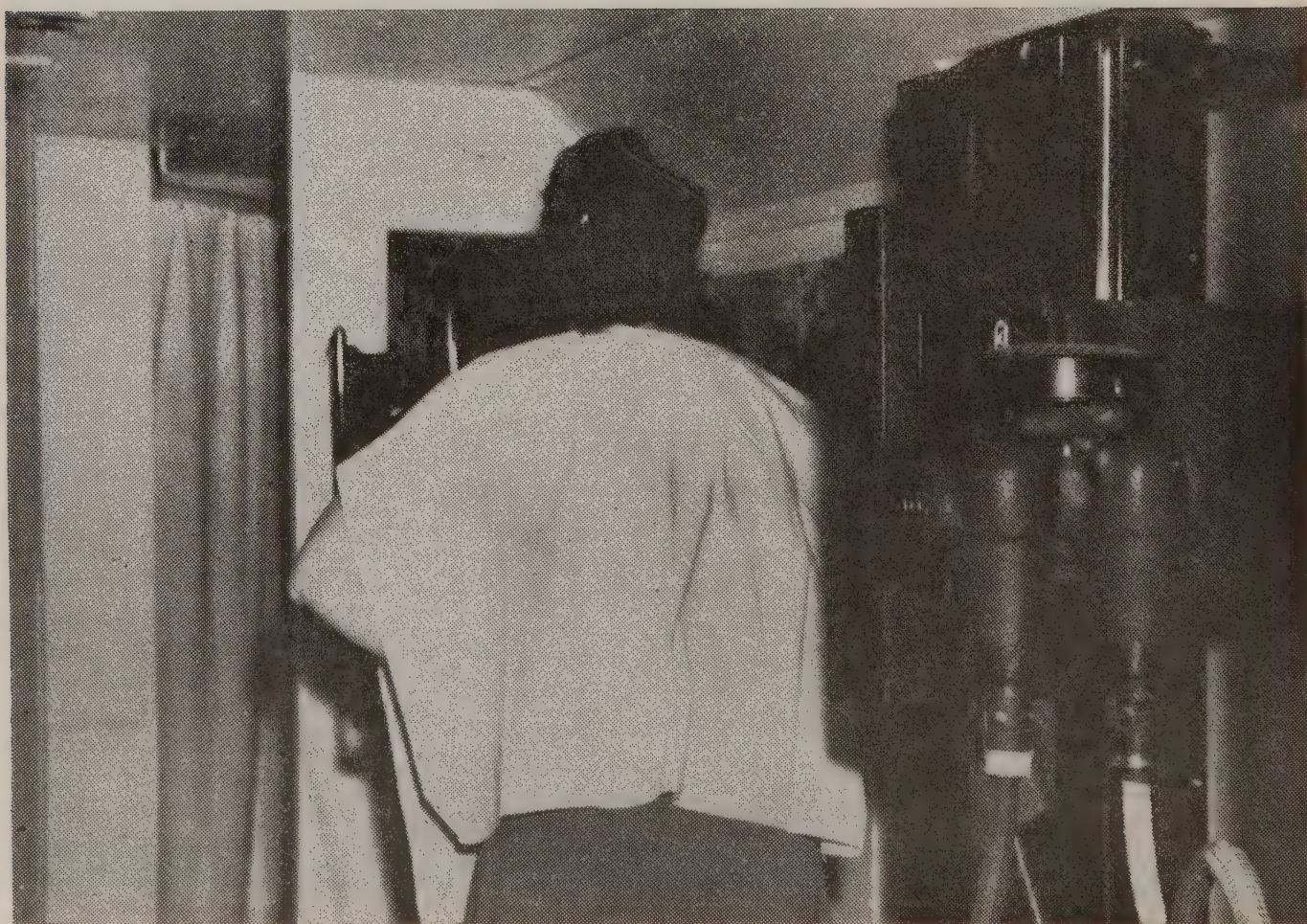
are offered as to their disposition, when treatment in the clinic is not feasible, and medication is provided where necessary. The clinics assist in the follow-up of patients discharged from the Mental Hospitals and it is through their medium also that many cases are presented to the Eugenics Board.

Mental Hygiene Clinics are held regularly in the City Hall, Calgary and in the Provincial Building, Edmonton. At intervals they are held at other points, which, prior to the war, included Lethbridge, Medicine Hat, Drumheller, High River, Red Deer, Didsbury, Stettler, Ponoka, Lamont, Clover Bar, and various centres in the Peace River and Grande Prairie districts. Owing to shortage of staff, it was necessary to discontinue many of these during the war years, but the service will be resumed as soon as possible. All examinations are made

by appointment, by addressing letters to the Director of Guidance Clinics, in care of the Provincial Mental Hospital, Ponoka.

The Eugenics Board Activities

The Eugenics Board, appointed by the provincial government, and consisting of two lay and two medical members, examines all cases referred to it for consideration for sterilization. Candidates are referred chiefly through the medium of the Guidance Clinics, Mental Hospitals, and the Red Deer Training School, though other authorities may draw the attention of the Board to cases thought suitable for presentation. All cases are subjected to a detailed physical and mental examination by competent individuals who prepare a detailed history of each for submission to the Board. The Sexual Sterilization Act provides authority both for the



A patient receives a chest X-Ray in a mobile examination unit. These units travel throughout the province offering free X-Ray service to all residents.



The staff of a mobile Chest X-Ray unit pauses for a photograph at the end of a hard day's work.

sterilization of mental defectives upon the recommendation of the Eugenics Board and for the sterilization, by their own consent, of those who have suffered from mental disorders. These cases must also be reviewed and approved by the Board.

The operations are performed in a modern and well equipped operating room in the Provincial Mental Hospital, Ponoka, by surgeons who are appointed by the provincial government on the recommendation of the Eugenics Board. Approximately one thousand operations have resulted from the examination of the two thousand cases which were presented to the Board up to the fall of 1945.

TUBERCULOSIS CONTROL

We called it the White Plague once. We lived in deathly fear of it—and with good cause, for in the

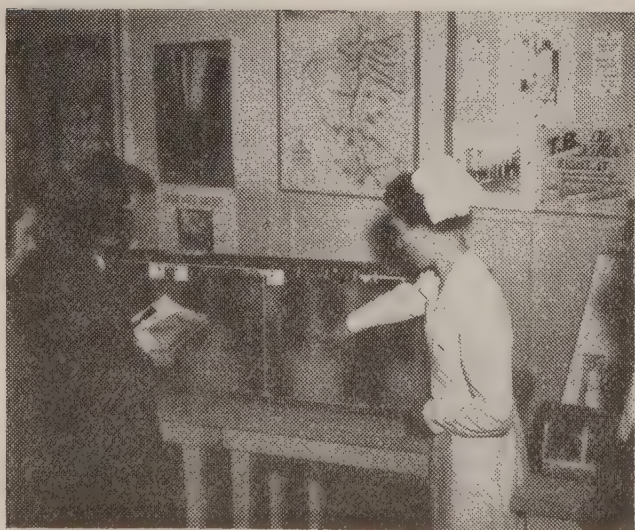
days before x-ray made possible the detection of its insidious onset, Tuberculosis won many a dark victory over our population. We know now that it is not a hopeless disease, though it requires a rather long, tedious period of treatment, and the earlier the discovery, the quicker the recovery. For this reason we are giving it no quarter in Alberta. We are attacking it from many angles and with every weapon at our disposal.

In June, 1936, The Tuberculosis Act came into force and since that time diagnosis and sanatorium treatment of Pulmonary Tuberculosis has been free to all Alberta residents. The Act is administered by the Division of Tuberculosis Control of the Department of Public Health, with headquarters at the Central Sanatorium, Calgary, and with a branch centre at the Tuberculosis Clinic in the Edmonton General Hospital.



Patients under treatment for tuberculosis gather in the open air for some of Alberta's health-giving sunshine. A varied programme of activities helps each day pass quickly.

The programme of the Tuberculosis Control Division is a comprehensive one. It is working to complete x-ray examinations of the entire population by means of clinics and mobile x-ray units. It is seeking to bring under modern sanatorium treatment all active cases of Pulmonary Tuberculosis, especially the early and the infectious ones—as well as to provide for periodic examinations of all dis-



Education of the public is an important phase in the work of the Tuberculosis Control Division. Distribution of literature is one way in which the programme is carried out.

charged patients, contacts and suspects. It is doing a good job in promoting rehabilitation of ex-patients in remunerative employment, and is carrying on an educational campaign on Tuberculosis prevention and control which is reaching every corner of the province. Last, but not the least valuable of its services, is the maintenance of a central registry in which is summarized all the data of the work carried on throughout the province. This includes records of all known cases of Tuberculosis, all deaths from Tuberculosis, all contacts and all suspects, and it is invaluable in estimating the progress that is being made, as well as in judging the comparative need of each community for clinic service.

Most spectacular perhaps in its programme is the service of the mobile x-ray units. Thanks to the Alberta Tuberculosis Association, there are two such units in operation in Alberta at the present time. Drawing on its Christmas Seal Fund, this organization, in 1943, and again early in 1945, purchased

a mobile unit, at a total cost of \$41,000.00, and presented both to the Department of Public Health for operation. These mobile x-ray units have made a magnificent contribution to the general diagnostic work in Alberta. They alone made possible up to September, 1946, the x-ray examination of 226,987 people, the survey to that point revealing an approximate total of 14 out of every 1000 persons suffering from either active or inactive Tuberculosis, the active cases averaging about 2 per thousand.

Utilizing the mobile units, the diagnostic clinics of the Provincial Department of Public Health have visited approximately 160 centres and have covered an area from Cardston in the south to Notikewin in the north. A pertinent observation which we might make here, however, is that their continued success depends upon the appreciation and co-operation of the Alberta public. Though it is estimated that 50% will co-operate readily, to get the other 50% x-rayed requires extensive and intensive work on the part of interested organizations and key people selected from the various communities served. **Only by 100% co-operation can all unknown cases and spreaders of Tuberculosis be found.**

Supplementing the work of the mobile x-ray units are the stationary and travelling clinics held in cities and at various hospital centres. Regular clinics are held weekly at the City Health Department, Calgary; General Hospital, Edmonton; and at the Central Alberta Sanatorium, Calgary. Prior to the war, various hospital centres were visited annually by a physician from the Tuberculosis Division, who conducted physical examinations, as well as arranging for x-ray examinations. Since the war, this has been limited to x-ray examinations only. Physicians may

secure such a service through application, and every effort is made to have all contacts x-rayed as soon as possible at the centres nearest their homes. Similarly, the regular clinics at Lethbridge, Medicine Hat, Drumheller, Red Deer, Stettler, Camrose, Vegreville and St. Paul have been in operation as x-ray centres only, during the war years.

Sanatorium accommodation in the province is provided through 288 beds in the Central Alberta Sanatorium and 200 beds in three Edmonton hospitals. This accommodation is inadequate, and it is expected that the construction of a new 200-bed sanatorium will be started as soon as materials are available. The present facilities, in addition to providing for civilian patients, also provide accommodation for members of the Armed Forces, under an agreement with the federal authorities. A limited amount of accommodation was also supplied to the Department of Indian Affairs until February, 1946, when the Department of National Health and Welfare opened the Charles Camsell Memorial Hospital in Edmonton, which provided 350 beds for Indian patients.

In addition to bed-rest treatment, approximately 50% of the Tubercular patients cared for in Alberta receive definite active treatment, in which either minor or major surgical procedures are often involved. Vocational training and occupational therapy are also being given in co-operation with the Alberta Tuberculosis Association which is particularly interested in rehabilitation work. Where necessary it is prepared to give tubercular patients in the province individual aid while they are learning new trades or completing academic courses, and it will also make provision to tide them over periods of financial embarrassment.

Educational work is a most important factor in the prevention and control of Tuberculosis. Public lectures, radio talks and a wide distribution of literature are being used to carry more and more information to the lay public. In addition, special instruction is given to nurses-in-training and medical students.

The cost of providing Tuberculosis services is approximately half a million dollars each year, and this is provided by one mill of the social service tax.

By these means then, we are winning a gradual but triumphant victory in Alberta over that once dreaded disease of which our grandparents whispered, "It's consumption! It's fatal!"

VENEREAL DISEASE CONTROL

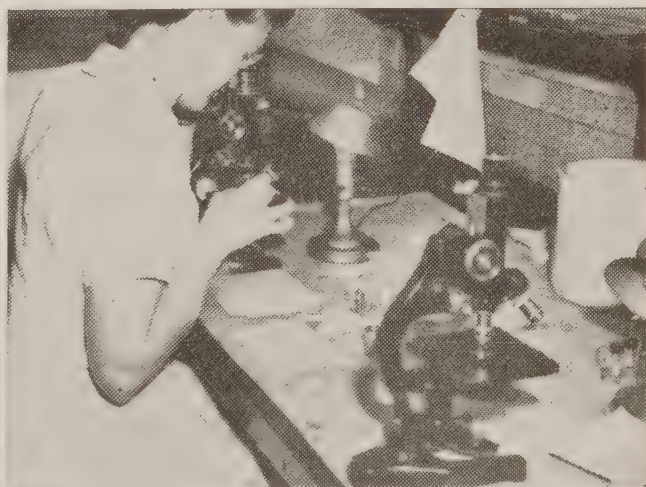
A programme of Venereal Disease Control has been carried on without interruption in the province for more than 25 years. It began with the formation of the Social Hygiene Division of the Department of Health in 1920, under the authority of The Venereal Diseases' Prevention Act.

The work of this Division is concerned with the treatment of venereal diseases and the prevention of their spread. Diagnostic and treatment facilities have been developed extensively and there are

now free clinics for this purpose in the larger cities, as well as special clinics in the northern part of the province. Drugs for treatment of venereally infected patients, together with medical advice and consultations with specialists, are provided to practising physicians free of charge.

In the preventive aspect of its work, the Division of Venereal Disease Control is concerned with all factors which facilitate the spread of venereal diseases. Recognized as one of the foremost amongst these is ignorance. Accordingly, in Alberta an extensive educational service is provided. Large quantities of literature dealing with the nature and control of venereal diseases are distributed annually. Public health lecturers give talks show appropriate educational films and answer questions, and such service is available to professional groups, as well as to community groups of any size. Numerous individual problems are also dealt with daily by consultation or correspondence and in these cases the moral side of the venereal disease problem is not forgotten. In its broader aspects, however, the moral teaching involved is a matter for the home, the

At left, below, is a camp near Grouard, Alberta, where the district's Indian and Metis population gathered for Venereal Disease treatment in August, 1946. At the right, a technician examines slides for diagnosis of gonorrhea.



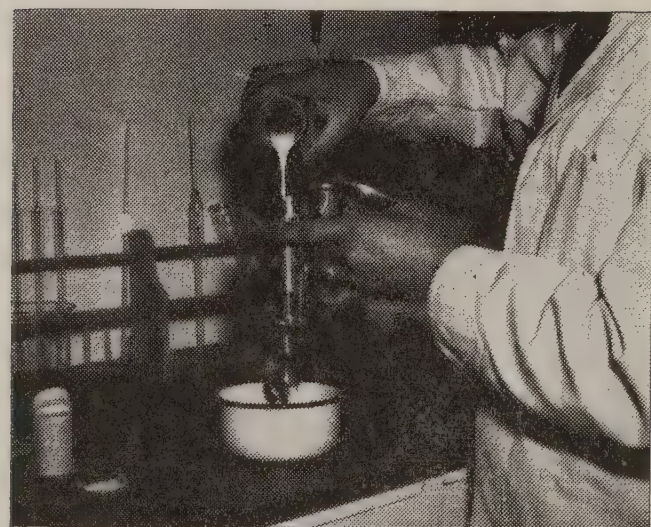
church, and the numerous character developing organizations which exist in any community.

Finding and bringing under control the sources of infection is another important part of the preventive programme. In this task the Royal Canadian Mounted Police and the local police forces have co-operated with the Division in the control of houses of prostitution, poorly managed rooming houses, dance halls and beer parlours. As a result of this co-operative effort, houses of prostitu-

tion are now almost non-existent in the province. Our system of individual case finding, too, is highly developed. It is carried on through the Venereal Disease Control Division by a staff of six social investigators, although part of the responsibility rests on the shoulders of the medical profession, and often, again, valuable assistance is rendered by the Police. In addition, the compulsory pre-marital blood test for Syphilis which came into effect on July 1, 1945 is now another important means of detecting sources of infection.

It is of interest to note that the approach in case finding is based on the fact that every person infected with a venereal disease possesses information of incalculable worth to his or her community. If such a person can be persuaded to divulge the identity of the individual from whom the disease was acquired, a truly valuable service will have been rendered the state. On the other hand, every unapprehended case is a focal point for the spread of further infections, which in turn become similar focal points, and so on, in a vicious chain.

Furthering the programme for province-wide control is an agreement which has recently been consummated between the National Department of Indian Affairs and the Provincial Department of Health, making possible the examination and treatment for venereal diseases of all Indians and Metis in the Grouard and Slave Lake districts. The Department of Indian Affairs provides the necessary transportation for the Indian and Metis population to and from the place of treatment, as well as maintenance for them while they are receiving treatment. One half



Top: testing milk samples from an Alberta farm; centre: a group of Albertans enrolled for a course in sanitation at Red Deer; bottom: a restaurant inspector at work.

of the required penicillin and the services of one nurse also come from the Dominion Government, while the remainder of the necessary staff and drugs is supplied by the Provincial Government. Of the fifteen hundred Indians and Metis in these areas, it is estimated from preliminary surveys, that approximately 10% are afflicted with one or both of the venereal diseases. It is anticipated that one of the greatest difficulties will be to persuade them to accept treatment, but already many of the leaders in their communities have promised full co-operation. If the project proves to be a success, it is planned to carry on with it until all of the Indians and Metis in the northern part of the province, who number approximately ten thousand, are examined and treated.

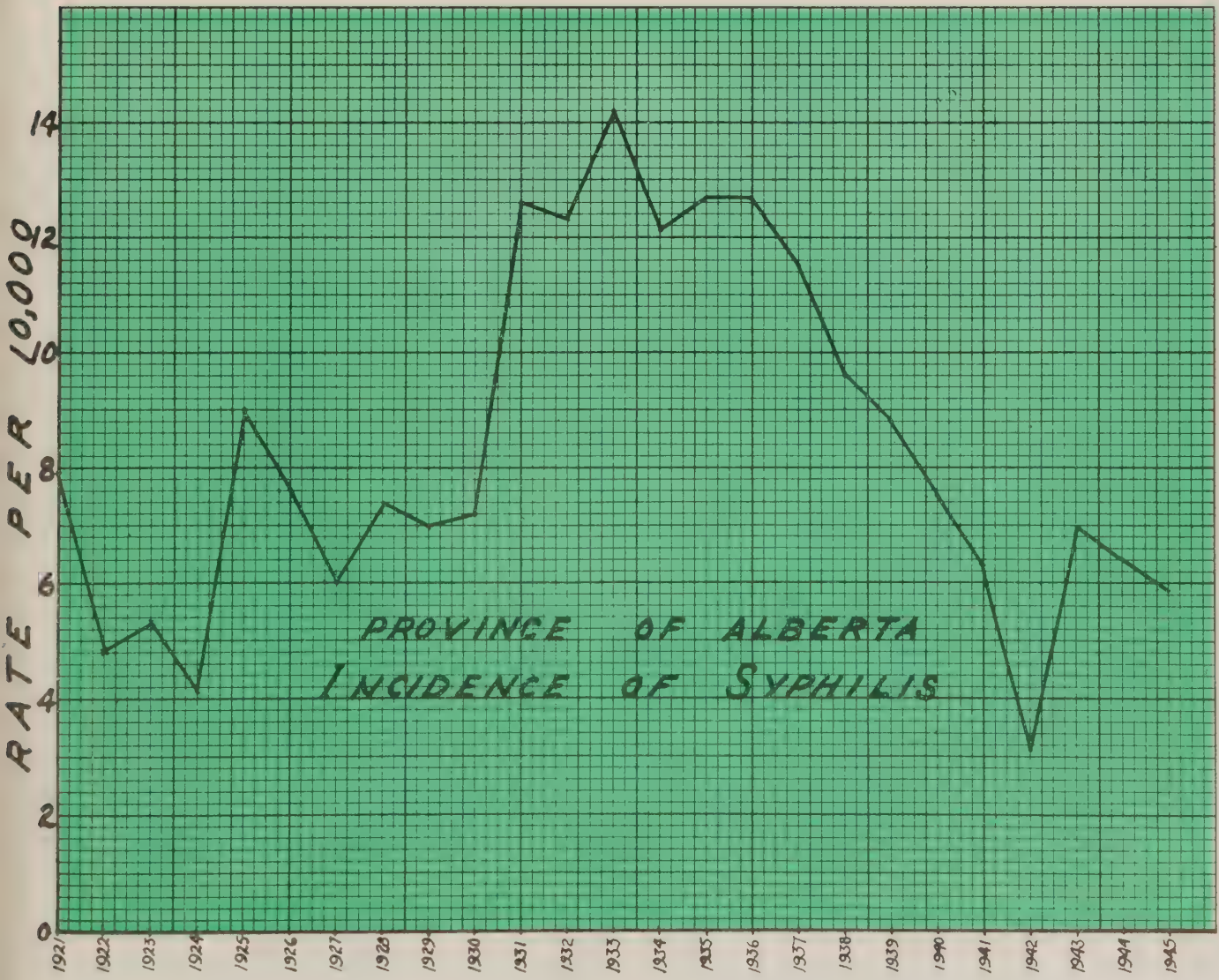
Even prior to this effort, however, the success of Alberta's Ven-

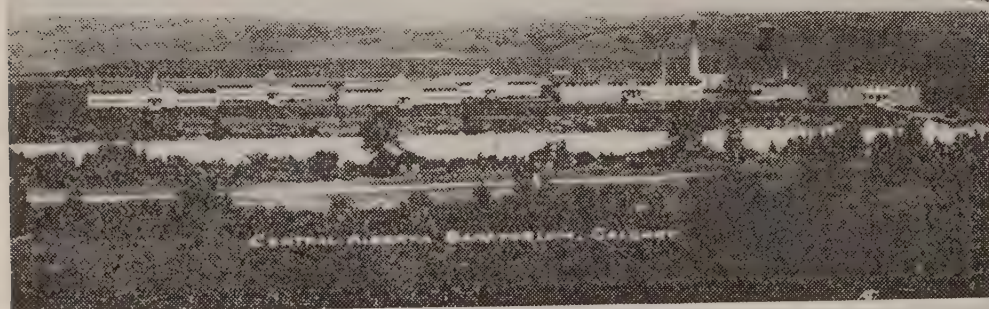
ereal Disease Control Programme has been reflected in the fact that more than 80% of the alleged sources of infection have been found and brought under treatment—a record not bettered elsewhere in the dominion.

All diagnosis, treatment and advice given in the Provincial Clinics are free, and all consultations are strictly confidential.

SANITATION

Sanitation is not a word with a romantic significance, but it is a word with a tremendous life-saving import. Because of all that it implies in this 20th century, millions of persons are being protected from those grimly devastating epidemics which once swept periodically and unchecked over both the old and new worlds. In a word, sanitary





Five provincial institutions. Top left is shown the Ponoka Mental Hospital; top right, the Oliver Mental Institute; centre, inset, the Central Alberta Sanatorium at Keith; centre, the Red Deer Training School; and lower the University hospital in Edmonton.

engineering is a major force in the battle against disease. But the maintenance of sanitary conditions in any area is by no means a simple task. It involves a knowledge of basic engineering as well as a comprehensive knowledge of various communicable diseases, their spread, and control.

In Alberta we have come a long way in sanitary engineering, but we have a considerable distance yet to go. To maintain standards, to inspect, supervise, and work for constant progress, the Department of Public Health has as part of its organization, a Division of Sanitation. This division is headed by a well qualified public health engineer under whose direction there functions both a sanitary inspector and a plumbing inspector. These inspectors are responsible for inspections in unorganized areas in the province and are available in an advisory capacity to organized municipalities. In them is vested the authority of the Provincial Board of Health, which means that they have the right to enter and inspect all public places and all private places where there is reason to suspect unsanitary conditions. All complaints are investigated, and prosecutions are made for wilful violation of the regulations. And drastic as such measures may seem to offenders, they are a very necessary factor in the safeguarding of the health of our people.

A system of regular inspection is maintained with regard to public water and milk supplies, restaurants, bakeries, slaughter houses, auto camps, lumber and other industrial camps and the abatement of public nuisances. In addition, the Provincial Sanitary Engineer examines and passes on all waterworks schemes, sewerage schemes, sewage disposal plants, public swimming pools, and all proposed hospital sites within the province. Encouragement and ad-

vice are given to local boards of health to assist them in complying with provincial regulations, particularly those relating to water and food supplies and the disposal of wastes.

Of these, the regulations concerning pasteurization of milk are of most vital concern at the moment. During March, 1945, the Provincial Legislature, recognizing the necessity of protecting the consumer against the constant danger of diseases transmitted by raw milk, amended The Public Health Act to enable local municipal councils to pass their own by-laws—subject to plebiscite—to enforce pasteurization. This is a step ahead, but until every municipality is enforcing such a by-law, there will still be needless deaths occurring in Alberta.

Within the functions of the Sanitary Division, as in any other organization concerned with public health, there is the ever-present task of educating the public. Literature on up-to-date methods of sanitation is sent out on request and at the present time there is a particularly gratifying increase in the demand for instructions on modern sewage disposal and on the installation of facilities for running water in rural homes. A personal visit by a staff member may supplement the circulation of such literature where it seems advisable.

All in all, the work of the Sanitation Division is not spectacular, but its efficacy has been shown over the years by a marked decrease in the number of cases of diseases ordinarily associated with poor sanitation. The infant mortality rate too, which is the best index of sanitary conditions in any area, has shown a steady downward trend. There are still areas in the province, however, in which sanitation must and can be greatly improved. Farming areas are no ex-

ception, and the Sanitation Division will not be fully content until modern plumbing and sewage disposal has been as widely inaugurated as possible, and until sanitation is as nearly perfected as it can be throughout the province. The fulfillment of these aims, needless to say, will be largely dependent upon the co-operation of all citizens.

MUNICIPAL HOSPITALS

Almost one third of the people in this province have provided themselves with what, in its final analysis, is a most successful form of health insurance. They have been enabled to do so through the co-operative hospitalization plan which went into effect with the passing of The Municipal Hospitals Act in 1918 and which is still functioning on a steadily increasing scale. Each of these districts is operated by the people within its boundaries and administered by its own board elected by the ratepayers. Perhaps one of the most outstanding features of the whole set-up is that not one of our Al-

berta municipal hospitals is existing under that dark blight called a "hospital deficit!" They are, without exception, in splendid financial condition.

Because this municipal hospital plan is peculiarly Alberta's own and because it is something of which she can be unreservedly proud, an outline of its organization is worthy of everyone's interest.

Twenty-five per cent of the resident ratepayers of any proposed district, or the council of a municipal district may petition the Minister of Health to establish a municipal hospital district. When such a petition has been approved, the Minister issues an order establishing the municipal hospital district and it is published in *The Alberta Gazette*. A provisional board is then appointed consisting of ratepayers of the contributing councils, who hold office until the next regular election of councillors or aldermen. Thereafter they are elected by the ratepayers. At the first meeting of the provisional board, a chairman, vice-chairman and sec-



A typical municipal hospital located at Stettler, Alberta

retary-treasurer, are appointed. A scheme or plan is prepared to suit the particular district, with the assistance and advice of the Supervisor of Municipal Hospitals of the Provincial Department of Public Health. This scheme sets out in detail how hospitalization is to be provided and all costs in connection therewith are shown. The scheme is then advertised throughout the district for a period of 14 days. After a lapse of 14 days, Notices of Polls are advertised for a similar period and the vote is then taken. A two-thirds majority of those voting is required to carry the scheme.

Municipal hospitals are sup-

ported through a yearly tax on all the property situated within the municipal hospital district. Those using the facilities of the hospital pay the rate of \$1.00 per day for this service. Provision is made under The Municipal Hospitals Act whereby persons, unable to qualify as ratepayers, may become hospital supporters by paying a sum, fixed by the board, on a certain date of each year. The sum is usually \$8.00 and it entitles the remitter to the \$1.00 per day rate. The owners of small parcels of land such as lots in hamlets, villages and towns, where the assessed value is not sufficiently high to produce a reasonable tax, may be



Here are two Alberta municipal hospitals. At the top is the hospital at Mannville. At the left is Didsbury's municipal hospital.





Educating the general public, making people conscious of the menace of rats, is one of the big jobs undertaken by the Health Department. Shown above is one of the displays designed to bring the threat to public attention. Inset, above left, and above right, are field crews at work.

required to make payment of a minimum sum. Hospital service is extended to all dependent members of the ratepayers' or supporters' families and their domestic female help at the above set rate.

The Municipal Hospitals Act also provides that a municipal hospital district may be formed in which the board may enter into agreements with privately owned hospitals for the hospitalization of the ratepayers within the district at an agreed rate per patient day. Three such districts were in operation by the end of 1945 and more are

contemplating coming under The Municipal Hospitals Act.

Organization and supervision of the municipal hospitals comes under the direction of the Supervisor of Municipal Hospitals of the Department. Through this division, hospital boards are furnished with information as to comparative costs of operation, methods of purchasing, accounting, construction services etc.

As at September 1, 1946 the municipal hospital plan included 17,453,888 acres of land, with an assessed value of \$207,022,488 at

an average rate of 4.9 mills. The total number of people receiving benefits under the plan was then approximately 238,788, with 44 municipal hospitals already operating, 6 new hospitals under construction and 16 additional districts contemplating coming under

the Act—an enviable record for any province.

PUBLIC HEALTH ENTOMOLOGY

It was as early as 1937 that Alberta recognized the importance of insect-transmitted diseases in re-



The picture below shows one of the clinics held yearly in southern Alberta for immunization against Rocky Mountain Spotted Fever. At the left is seen a field crew of the Division of Entomology preparing for the day's assignment.



lation to her public health problems. In 1938 an entomological survey was organized to study the situation. Originally this new work was given assistance by the Rockefeller Foundation and the Department of Pensions and National Health. Since 1942, however, the Provincial Department of Public Health has maintained the service alone except for the co-operation of the Department of National Health and Welfare in providing the laboratory services required. In 1944 the first Division of Entomology to be set up by a health department in Canada, was established in Alberta.

The survey of 1938, to begin with included only Rocky Mountain Spotted Fever and Plague, but in a short time investigations into the occurrence of Encephalomyelitis and Tularaemia were added. These last two are of considerable importance—Encephalomyelitis as an acute and often fatal disease, and Tularaemia or "rabbit fever", as it is generally known, as a disease which may have unsuspected ramifications in Western Canada. These are all insect-transmitted and, with the exception of Rocky Mountain Spotted Fever, may also be contracted by the handling of pelts of infected animals such as rabbits or gophers.

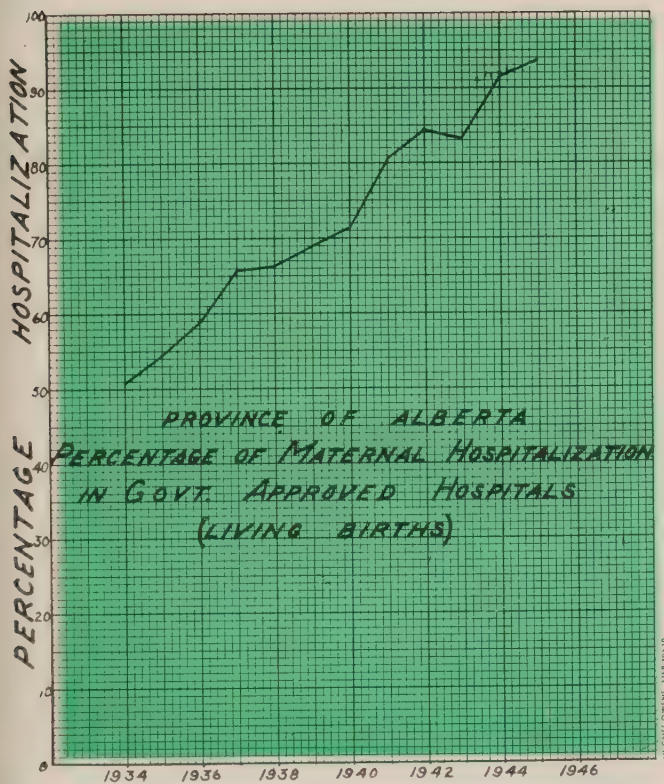
Thus at present the main function of the Division of Entomology is the locating and delimiting of areas harboring these diseases. This is accomplished by means of field crews equipped with traveling laboratories. The field work is important and only well trained men are employed. When infected areas are located all residents are informed of the fact by means of advertisements, radio talks and lectures, and are advised as to the steps which they should take to protect themselves. There are also yearly immunization clinics against Rocky Mountain Spotted Fever held in the south of the province.

In this problem of insect borne diseases, the rat is an unpleasant and dangerous factor, in that he is often the carrier of infected fleas. Were rats to gain a foothold in Alberta our plague problem would become greatly complicated. Accordingly considerable attention has been devoted to devising ways and means of preventing such an invasion. To date there is good evidence that as yet rats are not prevalent here, but it is known that they are well established in Saskatchewan and British Columbia, and are approaching our borders. Their western migration from Saskatchewan has brought them to within fifty miles of our eastern boundary, while their eastern migration in British Columbia has brought them as far as Revelstoke and Nelson, and possibly Corbin.

As the Division of Entomology is concerned with the prevention and control of all insect-borne diseases, its work is detailed and painstaking and is a tangible example of the fact that where the safeguarding of human life is involved, patience is a highly expendable element.

HOSPITAL INSPECTION

Alberta has more general hospital beds in operation in proportion to population than any other province in Canada. At the present time we average almost seven beds for every thousand of our population, while the accepted standard for Canada is six beds per thousand population. But we can be proud of this only as long as our hospital standards are maintained. Thus, to eliminate any doubt on this point, the Hospital Services Division of the Department of Public Health provides supervision of hospital plans and sites, assistance in the establishment of Municipal Hospital Districts, advice as to operation, and periodic inspection of all hospitals, whether ap-



proved or not. Approved hospitals are those whose buildings, equipment and services conform with provincial hospital regulations. Once approved, a hospital receives a grant of 45c per patient per day from the provincial government, and for the fiscal year of 1945, the cost of such grants to the provincial government was \$592,481.41. Non-approved hospitals in the province at the present time include only such private hospitals and baby shelters as are licensed for special purposes under The Private Hospitals Act.

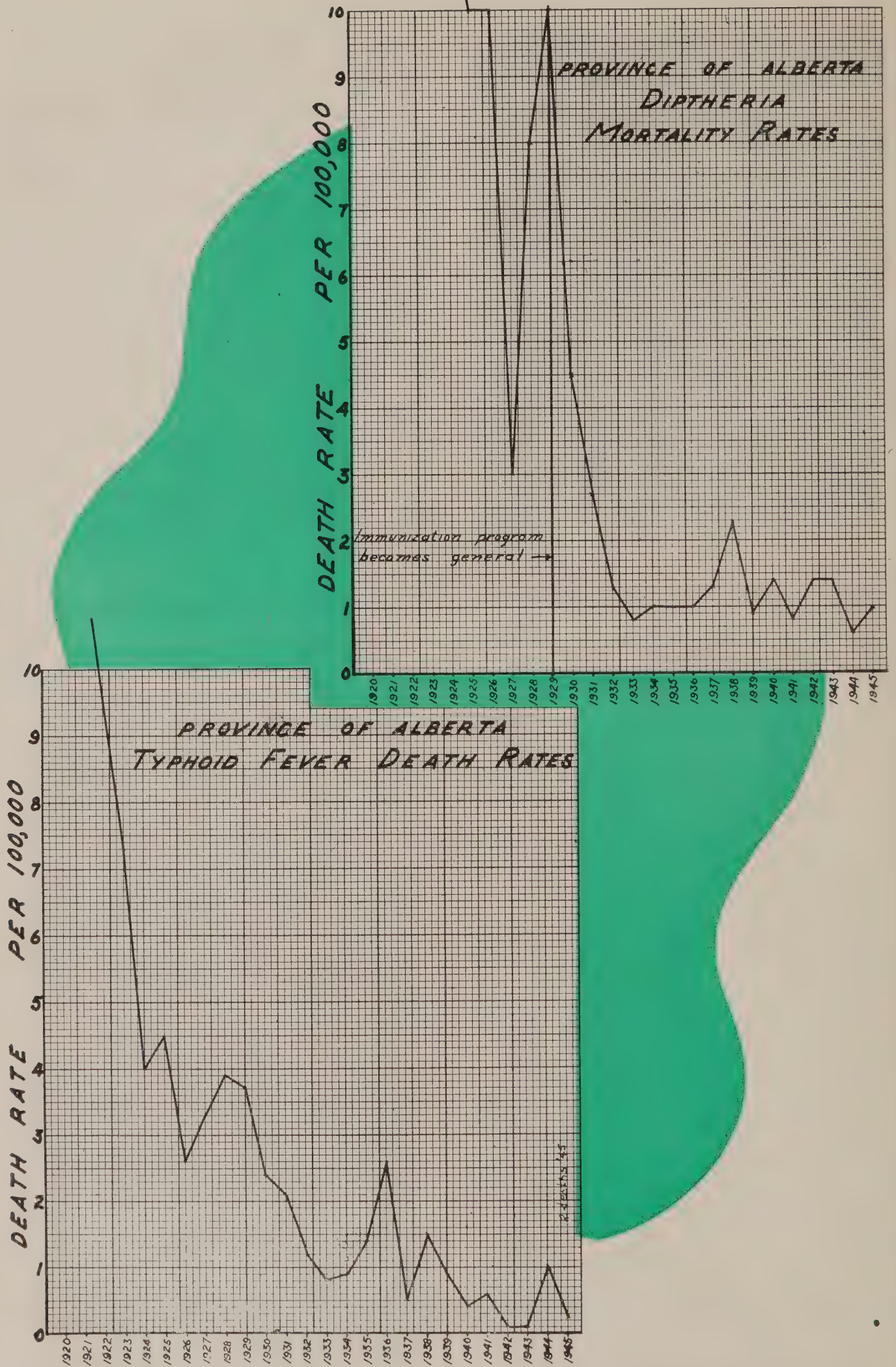
Hospital services have been on a steady increase in Alberta and their value has been definitely established. Adequate hospital treatment speeds recovery, saves working hours, money and lives. In maternity service alone, statistics show that the maternal death rate is more than three times as high in confinements which do not take place in a hospital. This means, too, that for every life lost in this way, there are several more whose physical abilities have been more or less seriously impaired. Thus it was that **The Maternity Hospitali-**

zation Act went into effect on April 1st, 1944. This provides free maternity hospital service for all Alberta maternity patients who have resided in the province for a period of twelve consecutive months as well as for wives of all servicemen who were resident in the province at the date of their enlistment. The only stipulations are that the patient shall have passed 28 weeks gestation and that the period of hospitalization should not exceed 12 days. With this legislation Alberta again blazed a trail, and it is expected that results will more than confirm the wisdom of the measure and more than justify the cost to the provincial government, which was approximately \$542,000 in the fiscal year of 1945.

COMMUNICABLE DISEASES

Communicable diseases are the delinquents of Medicine, and their control is one of its primary concerns. Many of them are dangerous and if the health authorities were to suddenly lose interest in prevention of their spread, a serious situation could result. For this reason there are numerous agencies in the province instrumental in the control of communicable diseases, and to provide an over-all supervision and unification of their efforts, there is the Division of Communicable Disease Control of the Department.

This Division is directly responsible for the control of communicable diseases in unorganized territories, while in organized areas it acts in a supervisory and advisory capacity to local health authorities. It collects statistics relative to communicable diseases in the province and correlates and studies them in an attempt to trace sources, contacts and current developments in epidemiology. The incidence of infectious diseases is recorded weekly and reports are sent to

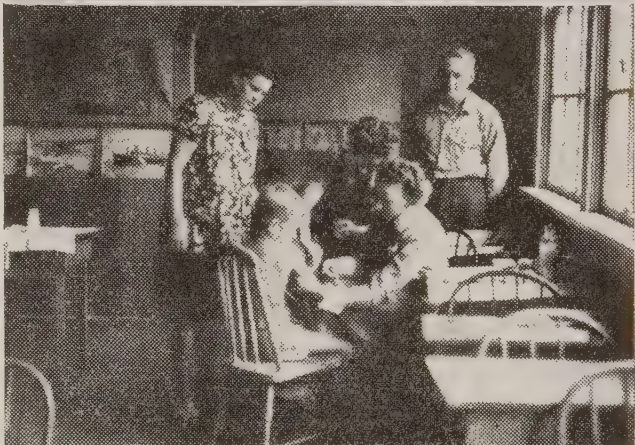
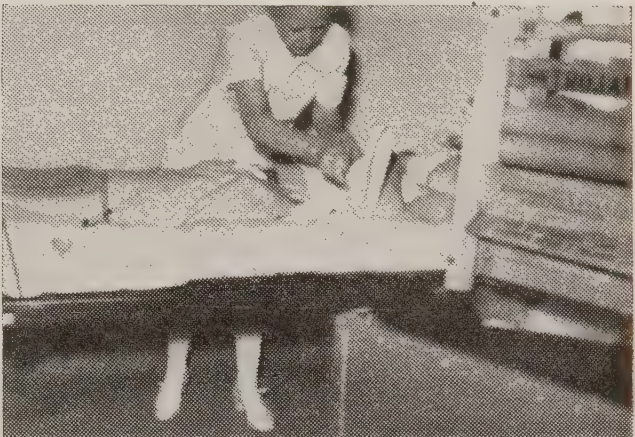


local health officers and to the dominion government. Supplies of antitoxins and vaccines are maintained, through the auspices of the Communicable Diseases Division, at central points in the province, for the convenience of local doctors. A Health Inspector is also employed to carry on immunization and health education work in outlying areas.

Added to the myriad other duties of this Division is the continuous one of keeping abreast of the newest information on control and treatment of communicable diseases, in order that Albertans may benefit as soon as possible from each advance in medical science as it applies to this particular phase of public health.

One communicable disease which might be specially mentioned in view of the fact that Alberta has led the way in its handling, is Infantile Paralysis. **The Poliomyelitis Sufferers Act** was placed on the statute books in 1938 and went into effect in the same year, providing assistance for cases which developed after its inception. This Act authorizes the Minister to enter into agreements with hospitals, which are properly equipped, for the care and treatment of persons suffering from the after effects of Poliomyelitis. Under this authority, agreements have been made with the University Hospital, Edmonton, and the Junior Red Cross Hospital, Calgary, for the hospitalization and medical and surgical care of such patients. Arrangements have also been made for the supervision of Poliomyelitis cases in out-patient clinics after their discharge from hospital, as well as for the provision of splints, special shoes, or such orthopedic appliances as may be recommended by an orthopedic specialist. In addition, the Act makes possible assistance for patients who wish to take academic or vocational training, which will prepare them for remunerative em-

In the layout below, top to bottom, are shown: a poliomyelitis patient receiving treatment at the University hospital, Edmonton; immunization of infants; a case-finding visit that resulted in the "Quarantined" sign on someone's door; the scourge of small-pox.



ployment. This rehabilitation work is carried on under the supervision of a public health nurse whose services are shared by the Departments of Health and Welfare.

All persons who have resided in the province for twelve consecutive months within the last twenty-four are entitled to the benefits provided under the Act, and all treatment, including both medical and surgical, is provided free of charge, regardless of the financial resources of the patient. It is essential to note, however, that these benefits do not commence until after the acute stage of the illness is over. During the fiscal year of 1945, the cost of this service was approximately \$23,000.

THE PROVINCIAL LABORATORY

That the aid of science is a prerequisite in maintaining public health has always been recognized in Alberta. Years ago the Provincial Government, through the Provincial Laboratory, initiated a means of efficient, inexpensive laboratory aid to physicians, local boards of health, hospitals and to the public in general. Housed in the Medical Building on the university campus, the laboratory is divided into two departments—the Department of Pathology and the Department of Bacteriology, each with its own duties but each working in close co-operation with the other.

Most highlighted in the public eye at the moment is the free tissue examination service provided to all practising physicians and hospitals by the Pathology Department. This particular function is a factor of untold value in Alberta's fight against cancer and it is one which can at any time have a deep personal significance to any citizen of the province. It means that tissue removed at operation may be examined free of charge to determine

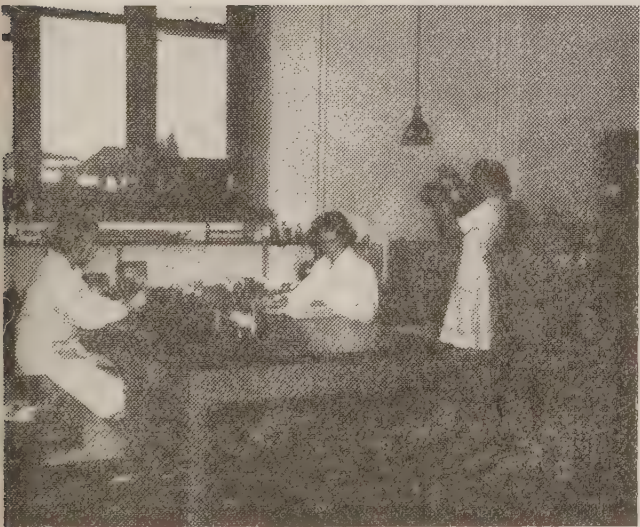
whether or not it is cancerous, and upon it will depend whether or not the physician must perform an extensive operation or whether he may rest assured that his patient's condition is non-cancerous.

The Provincial Laboratory also performs a useful service in connection with criminal investigations, in that it provides for the examination of tissues, blood stains and such materials as are of medico-legal importance.

The Department of Bacteriology is concerned with all those examinations which are of importance to public health in the control of communicable diseases and to the clinician in his search for the diagnosis of baffling infections. It studies materials collected from contaminated wounds and from infected areas as found, for example, in mastoid diseases, meningitis, or peritonitis, and reports on them to the physician. Where communicable diseases such as typhoid fever are suspected, specimens are examined and every effort is made to assist the doctor in diagnosing cases and in finding carriers of disease. Searches such as these often involve the examination of hundreds of specimens before one carrier is detected.

The laboratory likewise plays an important part in the diagnosis and control of venereal diseases. Due to the increased demand of the past few years for laboratory tests for persons admitted to hospital and employees in certain industries, as well as for pre-marital blood examinations, this part of its work has expanded to such an extent that a very considerable increase in staff and equipment and much more adequate accommodation is urgently required.

Many other services to public and citizen alike are provided by the Provincial Laboratory. Any resident of the province for in-



The top picture shows an important phase of laboratory work: the growing of bacteria for identification of diseases; at left is seen a group of laboratory technicians at work; at the bottom, two technicians carry out a test for syphilis.



stance may request an analysis of water samples from his own water supply. Any veterinary surgeon may send samples of blood from cattle for determination of evidences of contagious abortion. Any physician or medical officer of health may send in for anti-toxins, vaccines, or other biological products required in the prevention of disease. Adequate supplies of these products are kept on hand, and all but the serums which are to be used for treatment, are distributed without cost to the recipients. These latter are provided at cost.

In reality, practically all of the services outlined are provided free of charge and the value of those performed by the Provincial Laboratory for the year 1944 is estimated at \$196,195.

NUTRITION

Realizing the vital part which nutrition must play in any effective public health programme, the Department of Public Health, in September, 1943 added a Nutritionist to its staff.

Considered of first importance was the evolution of a community nutrition programme which would serve as a practical and workable model for the rural areas of the province. The Nutritionist was therefore attached to the staff of the Lamont Health District which had already been outstandingly active in nutrition education and in 1943 had conducted, as a publicity and teaching enterprise for the benefit of the housewives of the district, a six weeks' camp for undernourished boys. The unusual nature of the camp, together with the general improvement in the health of the thirty boys who had attended, had aroused universal interest, and the Lamont community was ready for and receptive to further nutrition education. Accordingly, projects in community

nutrition were continued and expanded. These included the distribution of vitamins to pre-school and school children, location and publicizing of local food sources with information on the best preparation of such foods, dietary surveys and general education implemented through lay participation, and nutrition education in the schools.

Lay participation in the nutrition programme proved a particularly unique and effective phase of the work. In selected school districts, housewives were invited to attend study groups where they received instruction in the preparation of adequate diets and the assembling and evaluation of diet records. They prepared reports on such matters as the use of Canada Approved flour and bread in their respective districts, the probable vitamin and mineral content of local diets, the quality of the school lunches and the relative distribution of pasteurized and non-pasteurized milk. Topics of discussion varied with the needs of each district, which were, in turn, determined by the dietary surveys conducted by the housewives and school children taking part in the project.

First, under the leadership of the Nutritionist, and later at their own instigation, the various groups met at weekly intervals. At the end of from four to six weeks, each group sponsored a public meeting in the local school or community hall and the committees of the group presented reports to the people of the community on the general state of nutrition in the district, along with suggestions for improvement. Twelve such groups were organized in the Health District.

In conjunction with this project, a summer school in public health and nutrition for teachers of the district was operated in August of 1944. Fifteen teachers were trained



to give material assistance with the work and to act as leaders in the organization and perpetuation of study groups both in the school and community.

Two special nutrition camps were also conducted for housewives in 1943 and again in 1945. The camps were held at Elk Island Park and were likewise designed to train leaders for the community nutrition programme.

Due to lack of personnel, further development of the nutrition programme of the Department of Public Health has not been possible. Nutrition education is, however, the constant concern of all public health personnel in the various Health Districts and there is also full co-operation between the Department of Public Health and the Nutrition Divisions of the Departments of Agriculture and Education in efforts at betterment of nutrition throughout the province.

ACCOUNTING DEPARTMENT

The business end of maintaining provincial health services is by no means the smallest of the duties of the Department of Public Health. Needless to say every effort is made to prevent unnecessary and injudicious outlay and to so arrange expenditures as to insure the greatest benefit where most needed.

In the matter of purchases, a system has been adopted whereby all requisitions must not only be approved by the Minister, but must also pass through the hands of a Purchasing Advisory Board. This Board or Agency secures prices and pertinent information regarding the various requisitioned items and upon its findings is based the final choice of purchases. In the pursuance of this procedure, however, it is not necessarily the lowest prices which are approved, but rather the ones which offer the best value for the money to be expended.

cost of service in cents per health dollar

30

25

20

15

10

5

Dept. of Public Health

Chart Showing
Breakdown of Expenditures of
The Public Health Dollar

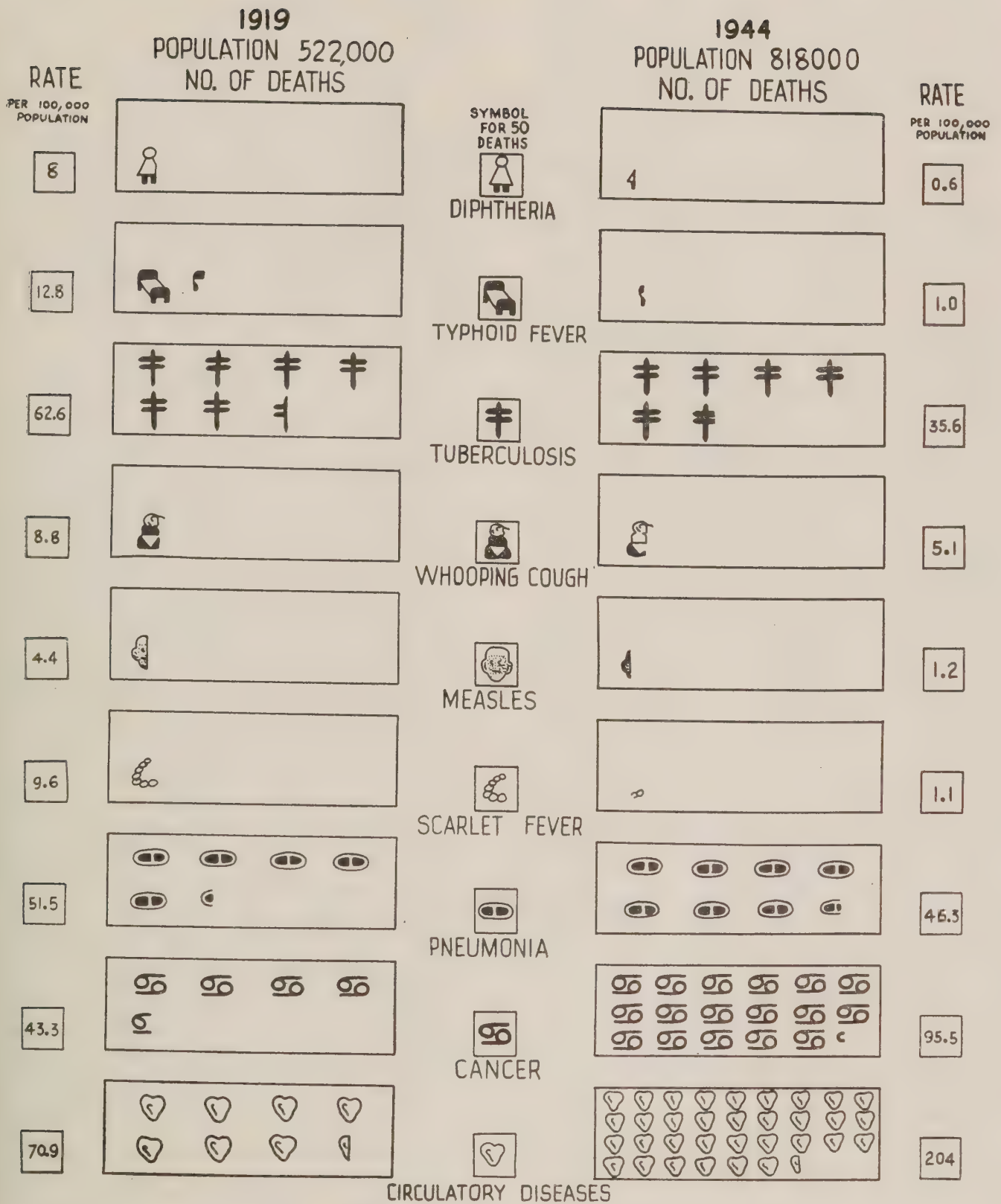
KEY

a	Civil Service Nurse.....	0.06c
b	Grants to Homes.....	0.10
c	Provincial Laboratory.....	0.16
d	Municipal Hospitals.....	0.18
e	Entomology.....	0.25
f	Health Education.....	0.30
g	Mental Hygiene.....	0.35
h	Insulin.....	0.40
i	Sanitary Engineering—Sanitation.....	0.40
j	University of Alberta Hospital.....	0.65
k	Poliomyelitis.....	0.75
l	Administration.....	0.90
m	Social Hygiene.....	1.00
n	Communicable Disease.....	1.30
o	Full Time Health Districts.....	1.60
p	Cancer Treatment and Prevention.....	2.80
q	Vital Statistics.....	2.90
r	Public Health Nursing.....	2.90
s	T.B. Control and Cent. Alta. San.....	14.60
t	Maternity Hospitalization.....	16.50
u	Hospital Inspection and Grants.....	19.50
v	Mental Institutions.....	32.50

Total..... 100.00c

A B C D E F G H I J K L M N O P Q R S T U V

services
Department of Public Health



Accounts for payment from all branches of the Department are channelled through the general office and after being signed by a designated official, are passed to the Audit and Treasury Departments for final settlement. An invoice is never passed for payment unless some responsible person has certified that the goods have been received or the services rendered.

Pay-roll procedure is equally careful. All pay-rolls must be signed by designated officials before being passed for payment, and no new name may appear on a pay-roll unless a previous staff change has been approved by the Minister, in the case of Institutional personnel, or by the Civil Service Commissioner, in the case of the personnel of other divisions.

Finally, all accounting records used in the Department of Public Health are subject to the approval of the Provincial Auditor.

The Accounting Department also carries an extra duty in the matter of dispensing free insulin to those residents suffering from diabetes, who are certified by their attending physician as requiring it, but who are financially unable to purchase their own. Persons requesting such assistance are required to fill out application forms provided for the purpose, and these are handled by the Accounting Department. It is its duty to evaluate the financial status of the individual as it is revealed in the information given on the forms and to decide whether or not he or she is eligible for assistance. The expenditure in providing this service for the fiscal year 1945-46 was \$11,947.78.

TO-DAY AND TO-MORROW

It is recognized by health authorities that the function of a Provincial Department of Public Health should be to give to local areas

such leadership, direction and assistance as will ensure the maintenance of a high standard of public health service. A fundamental aim is to guide and assist such areas to care for their own health needs effectively and efficiently.

Contributing towards this aim in Alberta are the following developments in our public health programme: the establishment of Municipal Hospital Districts, the development of our Provincial District Nursing service to meet the needs of outlying communities, and the organization of Full-time Rural Health Districts. While other outstanding contributions of the last quarter century are the pioneer work in the field of Health Education and Eugenics, the effective program developed in the prevention and control of Venereal Diseases, the provision of free sanatorium treatment for Tuberculosis, and the development of the Tuberculosis control programme, the free diagnostic and treatment services provided in Cancer control, the provision of free hospitalization for maternity patients, the provision of free hospital, medical and surgical care for patients suffering from the after effects of Infantile Paralysis, the services of the Public Health Engineering Division of the Department, the work carried on in connection with the prevention and control of Insect-Borne Diseases, the services of the Travelling Clinic, the services provided by our provincial mental institution and the services rendered in the field of Mental Hygiene by our Guidance Clinics, the services rendered by the Provincial Laboratory, the work of the Division of Vital Statistics, the results achieved in the prevention and control of communicable diseases and the services rendered in the inspection and supervision of approved hospitals.

There is still much to be done.

In our Rural Health Plan we propose to establish 45 full-time Rural Health Districts. With this number of Health Districts fully staffed with well trained personnel, we can go forward with full assurance of the results which will be achieved in the prevention and control of disease and in the saving of human lives.

We have 36 Provincial District Nurses now serving outlying communities. Twenty-four additional nurses are necessary to meet present needs and it is hoped that such a programme may be implemented in the near future.

The plans of the Department envisage the organization of services along the following lines: the establishment of six main sections of the Department, namely: (1) Administration (2) Environmental Sanitation (3) Preventive Medical Service (4) Mental Health (5) Hospitalization (6) District Health Service. Under these sections all existing and future divisions of the Department will be organized. With this type of organization, all

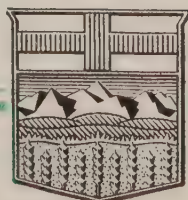
related services will be closely co-ordinated.

Health Insurance is also on the horizon for Alberta. In March, 1946, The Health Insurance Act was passed, providing the legislation necessary to fully implement a health insurance programme when Dominion - Provincial agreements make it financially possible. When a district is set up under the provisions of the Health Insurance Act, a plebiscite will be taken and the people of the district will determine by vote whether or not they desire the proposed service.

Nothing less than the best is good enough when we are dealing with a commodity of such priceless value as human life. No expenditure will give such rich dividends as money wisely expended for preventive health services. It has been demonstrated over and over again that we can have as much health as we are ready to pay for. Nothing less than a full measure of physical and mental health for every citizen of our province is our objective.



More detailed information on any of the matters mentioned in this book, as well as general material on health and the prevention of disease, may be obtained free of charge by writing to the Provincial Department of Public Health, Edmonton, Alberta.



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